

Series 1906 Polystyrene and Foil

Features: Flame retardant to UL94, high insulation resistance, very low dielectric absorption, long term stability, negative linear temperature coefficient.

Applications: Timing circuits, filters.

Packaging: Axial wrap and fill (TC), axial lead epoxy tube (EC).

Special Options: Different temperature coefficients (A1906, T1906).

Specifications

1) Temperature Range

-55°C to 85°C at rated voltage.

2) Capacitance

Capacitors shall be measured at 1 KHz ± 20 HZ. Measurements shall be taken at 25°C.

3) Dielectric Strength

At 25°C, 200% of rated voltage when applied terminal to terminal for one minute through a current limiting resistance.

4) Insulation Resistance

At 25°C after 2 minutes charge time at rated voltage or 500 VDC, whichever is less, the minimum IR shall be 500,000 Megohm-Microfarads, but need not exceed 1,000,000 Megohms.

5) Humidity Resistance

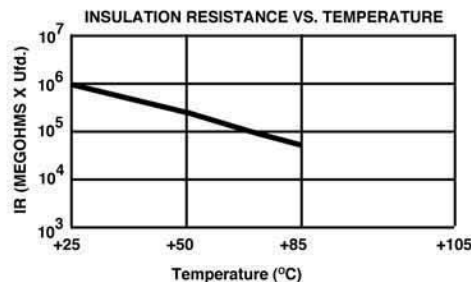
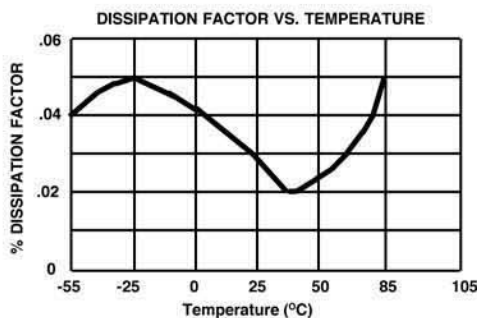
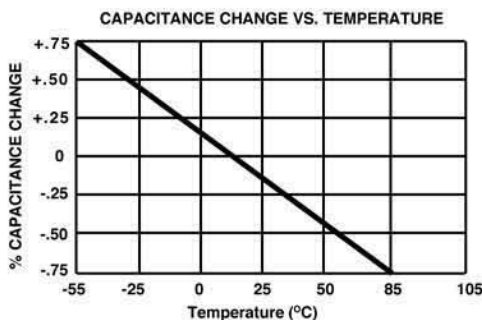
Series 1906 shall meet the requirements of MIL-STD. 202, Method 103B.

6) Dissipation Factor

Shall be 0.1% max. when measured at 1KHz and 25°C.

7) Life Test

Will withstand the application of 140% rated voltage at + 85°C for 250 hours with not more than one failure in 12 permitted.



Typical Temperature Curves Polystyrene and Foil

Catalog Nomenclature

*** 1 3 0 6 E F R - 3 - . 0 0 1 - 1 - 5**

Case Code:

- TC - Wrap & Fill - Round - Axial
- TF - Wrap & Fill - Flat - Axial
- EC - Epoxy Case - Round - Axial
- EFR - Epoxy Case - Flat - Radial
- DFR - Dipped Construction - Flat - Radial
- HS - Hermetically Sealed

Dielectric Code:

- 1206 - Polypropylene/Foil
- 1213 - Metallized Polypropylene
- 1306 - Polyester/Foil
- 1313 - Metallized Polyester
- 1613 - Metallized Polycarbonate
- 1906 - Polystyrene/Foil
- 2113 - Metallized Polyphenylene Sulfide

Size Code:

- 3 - Standard
- 2 - Miniature (1313DFR Series Only)
- X - Non-standard
- Or one letter case code

Capacitance:

In microfarads (μ F)

Voltage:

- .35 - 35 VDC
- 0 - 50 VDC
- 1 - 100 VDC
- 2 - 200 VDC
- 3 - 300 VDC
- 4 - 400 VDC
- 10 - 1000 VDC
- 1.6K - 1600VDC
- Etc.

Tolerance:

- 1 - 1%
- 2 - 2%
- 5 - 5%
- Etc.

*** Options**

The following options are available from EFC by specifying the appropriate prefix.

- A - Aluminum foil electrodes
- T - Tin foil electrodes
- HV - High voltage DC applications
- AC - AC voltage rated applications
- MF - Metallized and foil hybrid for maximum pulse current applications
- M - Dual metallized design for pulse current applications
- SP - Low ESR, high RMS current applications
- PC - Direct mount terminals for high current filter applications
- FT - Feed thru filter applications
- RC - Resistor capacitor suppressors



1906TC Tubular Wrap & Fill

Polystyrene and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .250D = 24 AWG
.250 - .440D = 22AWG
Above .440D = 20 AWG



Dimensions and Ratings

Cap.	100 VDC			Cap.	200 VDC		
μF	Part #	D	L	μF	Part #	D	L
.001	1906TC-3-.001-1-*	.180	.606	.001	1906TC-3-.001-2-*	.180	.606
.0012	1906TC-3-.0012-1-*	.180	.606	.0012	1906TC-3-.0012-2-*	.180	.606
.0015	1906TC-3-.0015-1-*	.180	.606	.0015	1906TC-3-.0015-2-*	.180	.606
.0022	1906TC-3-.0022-1-*	.180	.606	.0022	1906TC-3-.0022-2-*	.220	.606
.0027	1906TC-3-.0027-1-*	.180	.606	.0027	1906TC-3-.0027-2-*	.240	.606
.0039	1906TC-3-.0039-1-*	.210	.606	.0039	1906TC-3-.0039-2-*	.190	.606
.0047	1906TC-3-.0047-1-*	.220	.606	.0047	1906TC-3-.0047-2-*	.210	.606
.0056	1906TC-3-.0056-1-*	.240	.606	.0056	1906TC-3-.0056-2-*	.230	.606
.0068	1906TC-3-.0068-1-*	.180	.606	.0068	1906TC-3-.0068-2-*	.250	.606
.0082	1906TC-3-.0082-1-*	.200	.606	.0082	1906TC-3-.0082-2-*	.270	.606
.01	1906TC-3-.01-1-*	.220	.606	.01	1906TC-3-.01-2-*	.300	.606
.012	1906TC-3-.012-1-*	.230	.606	.012	1906TC-3-.012-2-*	.260	.731
.015	1906TC-3-.015-1-*	.260	.606	.015	1906TC-3-.015-2-*	.290	.731
.018	1906TC-3-.018-1-*	.280	.606	.018	1906TC-3-.018-2-*	.320	.731
.022	1906TC-3-.022-1-*	.250	.731	.022	1906TC-3-.022-2-*	.350	.731
.027	1906TC-3-.027-1-*	.280	.731	.027	1906TC-3-.027-2-*	.340	.856
.033	1906TC-3-.033-1-*	.300	.731	.033	1906TC-3-.033-2-*	.370	.856
.039	1906TC-3-.039-1-*	.330	.731	.039	1906TC-3-.039-2-*	.400	.856
.047	1906TC-3-.047-1-*	.310	.856	.047	1906TC-3-.047-2-*	.440	.856
.056	1906TC-3-.056-1-*	.340	.856	.056	1906TC-3-.056-2-*	.430	.981
.068	1906TC-3-.068-1-*	.370	.856	.068	1906TC-3-.068-2-*	.470	.981
.082	1906TC-3-.082-1-*	.410	.856	.082	1906TC-3-.082-2-*	.510	.981
.1	1906TC-3-.1-1-*	.400	.981	.1	1906TC-3-.1-2-*	.480	1.265
.12	1906TC-3-.12-1-*	.440	.981	.12	1906TC-3-.12-2-*	.530	1.265
.15	1906TC-3-.15-1-*	.490	.981	.15	1906TC-3-.15-2-*	.580	1.265
.18	1906TC-3-.18-1-*	.450	1.265	.18	1906TC-3-.18-2-*	.640	1.265
.22	1906TC-3-.22-1-*	.500	1.265	.22	1906TC-3-.22-2-*	.620	1.515
.27	1906TC-3-.27-1-*	.550	1.265	.27	1906TC-3-.27-2-*	.680	1.515
.33	1906TC-3-.33-1-*	.610	1.265	.33	1906TC-3-.33-2-*	.750	1.515
.39	1906TC-3-.39-1-*	.590	1.515				
.47	1906TC-3-.47-1-*	.640	1.515				
.56	1906TC-3-.56-1-*	.700	1.515				

This dielectric is available in limited quantities.
Please consult factory on all size and voltage requests.

* - Please insert appropriate tolerance code



1906TC Tubular Wrap & Fill

Polystyrene and Foil Capacitors

Lead Spec.
Tinned Copperweld
Under .250D = 24 AWG
.250 - .440D = 22AWG
Above .440D = 20 AWG



Dimensions and Ratings

Cap.	400 VDC			Cap.	600 VDC		
μF	Part #	D	L	μF	Part #	D	L
.001	1906TC-3-.001-4-*	.230	.606	.001	1906TC-3-.001-6-*	.240	.606
.0012	1906TC-3-.0012-4-*	.250	.606	.0012	1906TC-3-.0012-6-*	.260	.606
.0015	1906TC-3-.0015-4-*	.170	.606	.0015	1906TC-3-.0015-6-*	.290	.606
.0022	1906TC-3-.0022-4-*	.200	.606	.0022	1906TC-3-.0022-6-*	.250	.731
.0027	1906TC-3-.0027-4-*	.220	.606	.0027	1906TC-3-.0027-6-*	.270	.731
.0039	1906TC-3-.0039-4-*	.260	.606	.0039	1906TC-3-.0039-6-*	.320	.731
.0047	1906TC-3-.0047-4-*	.280	.606	.0047	1906TC-3-.0047-6-*	.350	.731
.0056	1906TC-3-.0056-4-*	.240	.731	.0056	1906TC-3-.0056-6-*	.320	.856
.0068	1906TC-3-.0068-4-*	.270	.731	.0068	1906TC-3-.0068-6-*	.350	.856
.0082	1906TC-3-.0082-4-*	.290	.731	.0082	1906TC-3-.0082-6-*	.390	.856
.01	1906TC-3-.01-4-*	.320	.731	.01	1906TC-3-.01-6-*	.370	.981
.012	1906TC-3-.012-4-*	.350	.731	.012	1906TC-3-.012-6-*	.400	.981
.015	1906TC-3-.015-4-*	.340	.856	.015	1906TC-3-.015-6-*	.450	.981
.018	1906TC-3-.018-4-*	.370	.856	.018	1906TC-3-.018-6-*	.490	.981
.022	1906TC-3-.022-4-*	.400	.856	.022	1906TC-3-.022-6-*	.450	1.265
.027	1906TC-3-.027-4-*	.390	.981	.027	1906TC-3-.027-6-*	.500	1.265
.033	1906TC-3-.033-4-*	.430	.981	.033	1906TC-3-.033-6-*	.550	1.265
.039	1906TC-3-.039-4-*	.470	.981	.039	1906TC-3-.039-6-*	.590	1.265
.047	1906TC-3-.047-4-*	.510	.981	.047	1906TC-3-.047-6-*	.650	1.265
.056	1906TC-3-.056-4-*	.470	1.265	.056	1906TC-3-.056-6-*	.610	1.515
.068	1906TC-3-.068-4-*	.520	1.265	.068	1906TC-3-.068-6-*	.670	1.515
.082	1906TC-3-.082-4-*	.570	1.265	.082	1906TC-3-.082-6-*	.740	1.515
.1	1906TC-3-.1-4-*	.630	1.265				
.12	1906TC-3-.12-4-*	.600	1.515				
.15	1906TC-3-.15-4-*	.670	1.515				
.18	1906TC-3-.18-4-*	.730	1.515				

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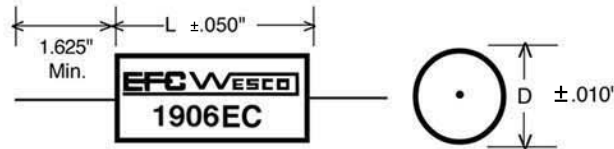


Please consult factory for special requirements, including non-standard values and sizes

1906EC
Tubular Plastic Case
(Axial Leads)

**Polystyrene and
Foil Capacitors**

Lead Spec.
Tinned Copperweld
Under .250D = 24 AWG
.250 - .440D = 22AWG
Above .440D = 20 AWG



Dimensions and Ratings

50 VDC				100 VDC				200 VDC			
Cap.	Part #	D	L	Cap.	Part #	D	L	Cap.	Part #	D	L
.001	1906EC-3-.001-0-*	.187	.500	.001	1906EC-3-.001-1-*	.187	.500	.001	1906EC-3-.001-2-*	.225	.375
.0012	1906EC-3-.0012-0-*	.187	.500	.0012	1906EC-3-.0012-1-*	.187	.500	.0012	1906EC-3-.0012-2-*	.225	.375
.0015	1906EC-3-.0015-0-*	.187	.500	.0015	1906EC-3-.0015-1-*	.187	.500	.0015	1906EC-3-.0015-2-*	.225	.375
.0022	1906EC-3-.0022-0-*	.225	.500	.0022	1906EC-3-.0022-1-*	.225	.500	.0022	1906EC-3-.0022-2-*	.225	.500
.0027	1906EC-3-.0027-0-*	.225	.500	.0027	1906EC-3-.0027-1-*	.225	.500	.0027	1906EC-3-.0027-2-*	.225	.500
.0039	1906EC-3-.0039-0-*	.187	.500	.0039	1906EC-3-.0039-1-*	.225	.500	.0039	1906EC-3-.0039-2-*	.225	.500
.0047	1906EC-3-.0047-0-*	.187	.500	.0047	1906EC-3-.0047-1-*	.225	.500	.0047	1906EC-3-.0047-2-*	.260	.550
.0056	1906EC-3-.0056-0-*	.225	.500	.0056	1906EC-3-.0056-1-*	.225	.500	.0056	1906EC-3-.0056-2-*	.250	.625
.0068	1906EC-3-.0068-0-*	.225	.500	.0068	1906EC-3-.0068-1-*	.225	.500	.0068	1906EC-3-.0068-2-*	.250	.625
.0082	1906EC-3-.0082-0-*	.225	.500	.0082	1906EC-3-.0082-1-*	.260	.550	.0082	1906EC-3-.0082-2-*	.250	.625
.01	1906EC-3-.01-0-*	.225	.500	.01	1906EC-3-.01-1-*	.260	.550	.01	1906EC-3-.01-2-*	.312	.625
.012	1906EC-3-.012-0-*	.260	.550	.012	1906EC-3-.012-1-*	.250	.625	.012	1906EC-3-.012-2-*	.312	.625
.015	1906EC-3-.015-0-*	.250	.625	.015	1906EC-3-.015-1-*	.250	.625	.015	1906EC-3-.015-2-*	.312	.750
.018	1906EC-3-.018-0-*	.250	.625	.018	1906EC-3-.018-1-*	.312	.625	.018	1906EC-3-.018-2-*	.312	.750
.022	1906EC-3-.022-0-*	.312	.625	.022	1906EC-3-.022-1-*	.312	.750	.022	1906EC-3-.022-2-*	.375	.750
.027	1906EC-3-.027-0-*	.312	.625	.027	1906EC-3-.027-1-*	.312	.750	.027	1906EC-3-.027-2-*	.375	.750
.033	1906EC-3-.033-0-*	.312	.625	.033	1906EC-3-.033-1-*	.312	.750	.033	1906EC-3-.033-2-*	.375	.875
.039	1906EC-3-.039-0-*	.312	.750	.039	1906EC-3-.039-1-*	.375	.750	.039	1906EC-3-.039-2-*	.437	.875
.047	1906EC-3-.047-0-*	.375	.750	.047	1906EC-3-.047-1-*	.375	.750	.047	1906EC-3-.047-2-*	.437	.875
.056	1906EC-3-.056-0-*	.375	.750	.056	1906EC-3-.056-1-*	.375	.750	.056	1906EC-3-.056-2-*	.500	.875
.068	1906EC-3-.068-0-*	.375	.750	.068	1906EC-3-.068-1-*	.375	.875	.068	1906EC-3-.068-2-*	.437	1.190
.082	1906EC-3-.082-0-*	.375	.875	.082	1906EC-3-.082-1-*	.437	.875	.082	1906EC-3-.082-2-*	.500	1.190
.1	1906EC-3-.1-0-*	.437	.875	.1	1906EC-3-.1-1-*	.437	.875				
.12	1906EC-3-.12-0-*	.437	.875	.12	1906EC-3-.12-1-*	.500	.875				
.15	1906EC-3-.15-0-*	.500	.875	.15	1906EC-3-.15-1-*	.500	1.190				
.18	1906EC-3-.18-0-*	.500	1.190	.18	1906EC-3-.18-1-*	.500	1.190				
.22	1906EC-3-.22-0-*	.500	1.190								

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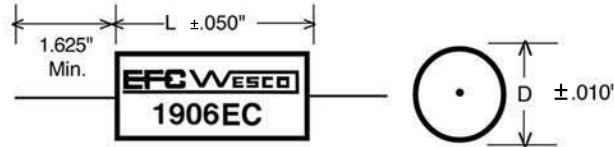
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Dimensions and Ratings

Cap.	400 VDC			Cap.	600 VDC		
μF	Part #	D	L	μF	Part #	D	L
.001	1906EC-3-.001-4*	.187	.500	.001	1906EC-3-.001-6*	.225	.625
.0012	1906EC-3-.0012-4*	.225	.500	.0012	1906EC-3-.0012-6*	.225	.625
.0015	1906EC-3-.0015-4*	.225	.500	.0015	1906EC-3-.0015-6*	.250	.625
.0022	1906EC-3-.0022-4*	.260	.550	.0022	1906EC-3-.0022-6*	.312	.625
.0027	1906EC-3-.0027-4*	.260	.550	.0027	1906EC-3-.0027-6*	.312	.625
.0039	1906EC-3-.0039-4*	.250	.625	.0039	1906EC-3-.0039-6*	.312	.750
.0047	1906EC-3-.0047-4*	.250	.625	.0047	1906EC-3-.0047-6*	.375	.750
.0056	1906EC-3-.0056-4*	.312	.625	.0056	1906EC-3-.0056-6*	.375	.750
.0068	1906EC-3-.0068-4*	.312	.625	.0068	1906EC-3-.0068-6*	.375	.875
.0082	1906EC-3-.0082-4*	.312	.750	.0082	1906EC-3-.0082-6*	.437	.875
.01	1906EC-3-.01-4*	.312	.750	.01	1906EC-3-.01-6*	.437	1.190
.012	1906EC-3-.012-4*	.375	.750	.012	1906EC-3-.012-6*	.437	1.190
.015	1906EC-3-.015-4*	.375	.750	.015	1906EC-3-.015-6*	.437	1.190
.018	1906EC-3-.018-4*	.375	.875	.018	1906EC-3-.018-6*	.500	1.190
.022	1906EC-3-.022-4*	.437	.875	.022	1906EC-3-.022-6*	.500	1.190
.027	1906EC-3-.027-4*	.437	.875				
.033	1906EC-3-.033-4*	.500	.875				
.039	1906EC-3-.039-4*	.500	1.190				
.047	1906EC-3-.047-4*	.500	1.190				

This dielectric is available in limited quantities.
Please consult factory on all size and voltage requests.

* - Please insert appropriate tolerance code